

U.S. Serial No. 10/661,741
Filed: September 12, 2003
Amendment and Response to Office Action dated 03/08/06
Page 2

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method ~~for determining a search ranking score,~~ comprising:
 - (a) receiving a search query associated with a user;
 - (b) ~~determining a first population associated with the search query~~identifying at least a first population group associated with the user;
 - (c) determining a first article associated with the search query; ~~and~~
 - (d) determining a population signal for the first article based at least in part on the first population group; and
 - (e) determining a first ranking score for the first article based at least in part on the population signal ~~data associated with the first population.~~
2. (Currently Amended) The method of claim 1, wherein determining the first population group associated with the search ~~query~~ user comprises determining a demographic data associated with ~~a sender of the user~~ search query.
3. (Currently Amended) The method of claim 2, wherein determining the demographic data associated with the ~~sender~~ user comprises determining a likely geographic location for the ~~sender~~ user.

U.S. Serial No. 10/661,741
Filed: September 12, 2003
Amendment and Response to Office Action dated 03/08/06
Page 3

4. (Currently Amended) The method of claim 3, wherein determining the likely geographic location for the ~~sender-user~~ comprises determining at least one of the following: the Internet Protocol address from which the search query was sent; an address input by the ~~sender-user~~ to access a search engine; and demographic data input by the ~~sender-user~~.

5. (Currently Amended) The method of claim 2, wherein determining the demographic data for the ~~sender-user~~ comprises determining at least one of the following: age, age range, sex, race, primary language, secondary language, location, income, income range, a continent, a region, a country, a state, a county, a city, a gender, an ethnic group, a group, persons with a shared characteristic, persons with a shared interest, persons grouped by a predetermined selection, and internet service provider data.

6. (Currently Amended) The method of claim 1, wherein determining the first population group associated with the ~~search-query-user~~ comprises determining a demographic data associated with the ~~search-query-user~~.

7. (Currently Amended) The method of claim 6, wherein determining the demographic data associated with the ~~search-query-user~~ comprises at least one of the following: determining the language of the search query; ~~and/or~~ determining data associated with previous senders of the search query.

U.S. Serial No. 10/661,741
Filed: September 12, 2003
Amendment and Response to Office Action dated 03/08/06
Page 4

8. (Currently Amended) The method of claim 1, wherein determining the first population group associated with the ~~search query user~~ comprises determining a self-identification data associated with ~~a the user transmitting the search query~~.

9. (Original) The method of claim 8, wherein the self-identification data is selected from at least one of the following: user registration data, user preference data, and user selected data.

10. (Currently Amended) The method of claim 1, wherein determining the first population group associated with the ~~search query user~~ comprises determining an automatic-identification data associated with ~~a the user transmitting the search query~~.

11. (Currently Amended) The method of Claim 10, wherein the automatic-identification data comprises at least one of the following: an IP address, a domain, and default data obtained by an application associated with the user.

12. (Currently Amended) The method of claim 1, wherein the ~~data associated with the first population~~ population signal comprises a selection score for the first article in a context of the first population group.

U.S. Serial No. 10/661,741
Filed: September 12, 2003
Amendment and Response to Office Action dated 03/08/06
Page 5

13. (Currently Amended) The method of claim 12, wherein the selection score for the first article in the context of the first population group comprises a number of clicks for the first article by members of the first population group for the search query.

14. (Currently Amended) The method of claim 12, wherein the population signal comprises a weight of relationship between the selection score and the search query data ~~associated with the first population comprises a number of members of the first population.~~

15. (Currently Amended) The method of claim ~~14~~1, wherein the population signal ~~number of members of the first population~~ comprises a number of members of the first population group that selected a result an article returned for the search query.

16. (Currently Amended) The method of claim ~~14~~1, wherein the population signal ~~number of members of the first population~~ comprises a number of members of the first population group that input the search query.

17. (Currently Amended) The method of claim ~~14~~13, wherein the population signal ~~comprises a smoothing factor associated with the clicks.~~ ~~number of members of the first population~~ ~~comprises a number of members of the first population to which search results for the search query were shown.~~

U.S. Serial No. 10/661,741
Filed: September 12, 2003
Amendment and Response to Office Action dated 03/08/06
Page 6

18. (Currently Amended) The method of claim 1, wherein the population signal data ~~associated with the first population~~ comprises a total selection score.

19. (Currently Amended) The method of claim 18, wherein the total selection score comprises a total number of members of the first population group that selected the first article.

20. (Currently Amended) The method of claim 1, further comprising determining a second population group associated with the ~~search query~~user; and wherein determining the ~~first ranking score~~population signal for the first article is further based at least in part on ~~data associated with the second population group~~.

21. (Currently Amended) The method of claim 1, further comprising
(ef) determining a second article associated with the search query; and
(dg) determining a second ranking score for the second article based at least in part on the population signal~~data associated with the first population~~.

22. (Original) The method of claim 21, further comprising ranking the first article and the second article based at least in part on the first ranking score and the second ranking score.

U.S. Serial No. 10/661,741
Filed: September 12, 2003
Amendment and Response to Office Action dated 03/08/06
Page 7

23. (Currently Amended) A computer-readable medium containing program code, comprising:

- (a) program code for receiving a search query associated with a user;
- (b) program code for ~~determining a first population associated with the search query~~identifying at least a first population group associated with the user;
- (c) program code for determining a first article associated with the search query; and
- (d) program code for determining a population signal for the first article based at least in part on the first population group; and
- (e) program code for determining a first ranking score for the first article based at least in part on the population signal data associated with the first population.

24. (Currently Amended) The computer-readable medium of claim 23, wherein the program code for determining the first-population group associated with the search query user is adapted for determining a demographic data associated with ~~a sender of the user~~search query.

25. (Currently Amended) The computer-readable medium of claim 24, wherein determining a demographic data associated with a ~~sender~~user comprises determining a likely geographic location for the ~~sender~~user.

26. (Currently Amended) The computer-readable medium of claim 25, wherein determining a likely geographic location for ~~a sender~~the user comprises determining at

U.S. Serial No. 10/661,741
Filed: September 12, 2003
Amendment and Response to Office Action dated 03/08/06
Page 8

least one of the following: the Internet Protocol address from which the search query was sent; an address input by the ~~sender~~user to access a search engine; and demographic data input by the ~~sender~~user.

27. (Currently Amended) The computer-readable medium of claim 24 wherein determining the demographic data for a ~~sender~~the user comprises determining at least one of the following: age, age range, sex, race, primary language, secondary language, location, income, income range, a continent, a region, a country, a state, a county, a city, a gender, an ethnic group, a group, persons with a shared characteristic, persons with a shared interest, persons grouped by a predetermined selection, and internet service provider data.

28. (Currently Amended) The computer-readable medium of claim 23, wherein determining the first-population group associated with the ~~search-query-user~~ comprises determining a demographic data associated with the ~~search-query-user~~.

29. (Currently Amended) The computer-readable medium of claim 28, wherein determining the demographic data associated with the ~~search-query-user~~ comprises at least one of the following: determining the language of the search query; and/or determining data associated with previous senders of the search query.

U.S. Serial No. 10/661,741
Filed: September 12, 2003
Amendment and Response to Office Action dated 03/08/06
Page 9

30. (Currently Amended) The computer-readable medium of claim 23, wherein determining the first population associated with the ~~search query user~~ comprises determining a self-identification data associated with a ~~the~~ user transmitting the search query.

31. (Original) The computer-readable medium of claim 31, wherein the self-identification data is selected from at least one of the following: user registration data, user preference data, and user selected data.

32. (Currently Amended) The computer-readable medium of claim 23, wherein determining the first population group associated with the ~~search query user~~ comprises determining an automatic-identification data associated with a ~~the~~ user transmitting the search query.

33. (Currently Amended) The computer-readable medium of claim 32, wherein the automatic-identification data comprises at least one of the following: an IP address, a domain, and default data obtained by an application associated with the user.

34. (Currently Amended) The computer-readable medium of claim 23, wherein the ~~data associated with the first population~~ population signal comprises a selection score for the first article in a context of the first population group.

U.S. Serial No. 10/661,741
Filed: September 12, 2003
Amendment and Response to Office Action dated 03/08/06
Page 10

35. (Currently Amended) The computer-readable medium of claim 34, wherein the selection score for the first article in the context of the first population group comprises a number of clicks for the first article by members of the first population group for the search query.

36. (Currently Amended) The computer-readable medium of claim ~~23~~34, wherein the population signal comprises a weight of relationship between the selection score and the search query~~data associated with the first population comprises a number of members of the first population~~.

37. (Currently Amended) The computer-readable medium of claim ~~36~~23, wherein the population signal ~~number of members of the first population~~ comprises a number of members of the first population group that selected ~~a result~~ an article returned for the search query.

38. (Currently Amended) The computer-readable medium of claim ~~36~~23, wherein the population signal ~~number of members of the first population~~ comprises a number of members of the first population group that input the search query.

39. (Currently Amended) The computer-readable medium of claim ~~36~~35, wherein the population signal comprises a smoothing factor associated with the clicks~~number of~~

U.S. Serial No. 10/661,741
Filed: September 12, 2003
Amendment and Response to Office Action dated 03/08/06
Page 11

~~members of the first population comprises a number of members of the first population to which search results for the search query were shown.~~

40. (Currently Amended) The computer-readable medium of claim 23, wherein the population signal data associated with the first population comprises a total selection score.

41. (Currently Amended) The computer-readable medium of claim 40, wherein the total selection score comprises a total number of members of the first population group that selected the first article.

42. (Currently Amended) The computer-readable medium of claim 23, further comprising determining a second population associated with the search query user; and wherein determining the ~~first ranking score~~ population signal for the first article is further based at least in part on ~~data associated with the second population group~~.

43. (Currently Amended) The computer-readable medium of claim 23 further comprising:

(ef) program code for determining a second article associated with the search query; and

(fg) program code for determining a second ranking score for the second article based at least in part on the population signal ~~data associated with the first population~~.

U.S. Serial No. 10/661,741
Filed: September 12, 2003
Amendment and Response to Office Action dated 03/08/06
Page 12

44. (Currently Amended) The computer-readable medium of claim 43 further comprising program code for ranking the first article and the second article based at least in part on the first ranking score and the second ranking score.